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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/557,740	04/25/2000	BENJAMIN M WESTBROOK	1018.100US1	9939

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EXAMINER

DELGADO, MICHAEL A

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 10/20/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/557,740	Applicant(s) WESTBROOK, BENJAMIN M	
	Examiner Michael S. A. Delgado	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/27/03 have been fully considered but they are not persuasive. In response to the argument of claim 1. The concept of object oriented approach is well known in the art and provides the benefit of being more flexible when compares to conventional programming languages. An object as define by the Newton's Telecom Dictionary 18th Updated and Expanded Edition by Harry Newton, is "An entity or component, identifiable by the user that may be distinguishable by its properties, operations and relationships." A process that is used in traditional programming language as in, the Jeffords et al, reference is equivalent to an object. A process is an identifiable entity, which in the case of the reference, is a process to modify a shared entity (Col 2, lines 35-67). This process is related to the operation of modifying a shared object as disclosed by Jeffords, which is consistent with the definition of an object as known in the art.

A method as define by the Newton's Telecom Dictionary 18th Updated and Expanded Edition by Harry Newton, is " the specific implementation of an operation for a class; code that can be executed in response to a request". The "sub-protocol" as referred by the applicant is consistent with this definition (Col 4, lines 25-65). The "sub-protocol" is executed upon a request by a processor. An entity that requests service is classified as a client as in the case of a peer process requesting a lock to modify an entity (Col 4, lines 25-67). The "lock owner" that services the request is consistent with the operation of a server as known in the art.

In response to arguments of claim 5 and 7. Claim 5 and 7, talk about the machine-readable medium that is used to store the functions already covered in claim 1, (Figure 2 and 4).

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In response to argument of claim 10. Claim 10 talks about a computer system that uses the functions already covered in claim 1.

In response to argument of claim 12 and 16, the functions of claim 1 plus the limitation of adding a queue to manage access to the shared object by more than one client is covered by Jeffords. A proxy is defined by the Newton's Telecom Dictionary 18th Updated and Expanded Edition by Harry Newton, as "an intermediate application program that acts as both a client and as server". The "lock owner" process acts like a server whenever a request is made by a process to receive the lock (Col 5, lines 25-40). The processes are placed in queue and the "lock owner" in turn becomes a client when it requests to locate the present holder of the lock (Col 5, lines 25-40). The holder of the lock acts in the capacity of a server when a request is made by the queue. Whenever the lock is available, it is given to the next process in the queue (Col 5, line 55-65), which is equivalent to the object queue calling the client lock granted method of the client object.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 5, 7-8, 10, 12-14, 16-18 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 6,141,720 by Jeffords et al.

In claim 1, Jeffords teaches about a computer-implemented method comprising (Fig 4):

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calling by a client object of a request lock method of a server object , “lock owner”, requesting access (Col 4, lines 30-55); and,

when the server object , “lock owner”, decides to grant the access to the client object, calling by the server object , “lock owner”, of a lock granted method of the client object (Col 4, lines 30-55),

such that the access by the client object is released when the client object returns the lock granted method (Col 4, lines 45-60).

In claim 2, Jeffords teaches about a method of claim 1, further comprising, prior to calling by the server object , “lock owner”, of the lock granted method of the client object, deciding by the server object , “lock owner”, to grant the access to the client object (Col 4, lines 45-60).

In claim 3, Jeffords teaches about a method of claim 1, further comprising returning by the client object of the lock granted method, such that the access by the client object is released (Col 4, lines 55-65).

In claim 5, Jeffords teaches about a machine-readable medium having instructions stored thereon for execution by a server object , “lock owner”, governing access to perform a method comprising (Fig 4):

receiving a call from a client object of a request lock method of the server object , “lock owner”, requesting the access (Col 4, lines 30-55);

determining to grant the access to the client object (Col 4, lines 30-55); and,

upon determining to grant the access to the client object, calling a lock granted method of the client object (Col 4, lines 30-55),

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such that the access by the client object is released when the client object returns the lock granted method (Col 4, lines 55-65).

In claim 7, Jeffords teaches about a machine-readable medium having instructions stored thereon for execution by a client object desiring access governed by a server object, "lock owner", to perform a method comprising (Fig 4):

calling a request lock method of the server object, "lock owner", requesting the access (Col 4, lines 30-55);

receiving a call from the server object, "lock owner", to a lock granted method of the client object granting the access (Col 4, lines 30-55),

such that the access is released when the client object returns the lock granted method (Col 4, lines 55-65).

In claim 8, Jeffords teaches about a medium of claim 7, the method further comprising returning by the client object of the lock granted method, such that the access by the client object is released (Col 4, lines 55-65).

In claim 10, Jeffords teaches about a computerized system comprising (Fig 4):

at least one client object, each client object having a lock granted method (Col 5, lines 50-60); and,

a server object, "lock owner", governing access to data having a request lock method (Col 5, lines 25-40),

such that a client object requests the access to the data by calling the request lock method of the server object, and when the server object, "lock owner" (Col 5, lines 25-40), decides to grant the access to the client object, the server object, "lock owner", calls the lock granted

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method of the client object, the access released by the client object when the client object returns the lock granted method (Col 5, lines 55-65).

In claim 12, Jeffords teaches about a computerized system comprising (Fig 4):

at least one client object, each client object having a client lock granted method (Col 5, lines 50-60);

a server object, "lock owner", governing access to data having a server request lock method (Col 5, lines 25-40);

an object queue to manage the access to the data governed by the server object, "lock owner" (Col 5, lines 30-40), by having a proxy lock granted method and a proxy request lock method (Col 5, lines 30-65),

such that a client object requests the access to the data by calling the proxy request lock method of the object queue (Col 5, lines 30-40), the object queue then calling the server request lock method of the server object, the server object (Col 5, lines 30-40), "lock owner", then calling the proxy lock granted method of the object queue (Col 5, lines 50-60), and the object queue then calling the client lock granted method of the client object (Col 5, lines 50-65).

In claim 13, Jeffords teaches about a system of claim 12, wherein the access is released by the client object when the client object returns the client lock granted method (Col 5, lines 55-65).

In claim 14, Jeffords teaches about a system of claim 12, wherein the access is released by the object queue then the object queue returns the proxy lock granted method (Col 7, lines 5-20).

In claim 16, Jeffords teaches about a computer-implemented method comprising:
calling by a client object of a proxy request lock method of an object queue requesting client access to data ultimately managed via a server object (Col 5, lines 50-60);
upon determining by the object queue that the object queue currently is not waiting for proxy access to the data, calling by the object queue of a server request lock method of the server object , “lock owner”, requesting the proxy access (Col 7, lines 5-20);
when the server object , “lock owner”, decides to grant the access to the object queue, calling by the server object , “lock owner”, of a proxy lock granted method of the object queue (Col 5, lines 50-65); and,
calling by the object queue of a client lock granted method of the client object (Col 5, lines 50-65).

In claim 17, Jeffords teaches about a method of claim 16, further comprising returning by the client object of the client lock granted method, such that the client access by the client object is released (Col 7, lines 15-25).

In claim 18, Jeffords teaches about a method of claim 17, further comprising upon determining by the object queue that the object queue is empty of client requests, returning by the object queue of the proxy lock granted method, such that the proxy access by the object queue is released (Col 7, lines 5-20).

In claim 20, Jeffords teaches about a method of claim 16, wherein the proxy access consists of read-and-write access (Col 2, lines 35-40).

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6, 9, 11, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,141,720 by Jeffords et al in view of US Patent No. 6,026,401 by Brealey et al.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In claim 4, Jeffords teaches about a read-write access operation (Col 2, lines 35-40) but does not teach about using a read-only mode of operation. Brealey teaches about a method and apparatus for coordination of share object in a distributed system in which a read-only mode of operation was used (Col 8, lines 40-45).

It would have been obvious at the time of the invention for some one of ordinary skill to use a read-only mode of operation to prevent any of the users modifying an important file. In a database that contains important files that are shared amongst different users, it is important to

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keep a true copy of such files and thus modification is not allowed. To prevent any user from changing any of these files, a read-only mode of operation is used.

In claim 6, a medium of claim 5, wherein the access requested by the client object is one of read-only access and read-and-write access (Covered in claim 4).

In claim 9, a medium of claim 7, wherein the access requested by the client object is one of read-only access and read-and-write access (Covered in claim 4).

In claim 11, a system of claim 10, wherein the access requested by the client object is one of read-only access and read-and-write access (Covered in claim 4).

In claim 15, a system of claim 12, wherein the access requested by the client object is one of read-only access and read-and-write access (Covered in claim 4).

In claim 19, a method of claim 16, wherein the client access comprises one of read-only access and read-and-write access (Covered in claim 4).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,566,302 by Khalidi et al, teaches about a method for executing operation call from client application using shared memory region and establishing shared memory region when the shared memory region does not exist.

US 4,399,504 by Obermarck et al , teaches about a method and means for the sharing of data resources in a multiprocessing, multiprogramming environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael S. A. Delgado whose telephone number is 703-305-8057. The examiner can normally be reached on 8 AM - 4.30PM.

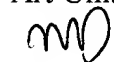
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703)308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7239 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

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MD

October 16, 2003



BUNJOB JAOENCHONWANIT
PRIMARY EXAMINER